

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A user interface conversion system comprising a processor which comprises a gateway wherein an integrated user interface is generated based on neutral user interfaces of devices residing on a home network and converted into a specific user interface suitable for a specific client of a user,

wherein the gateway requests a control device to transmit a neutral user interface selected by the user from the integrated user interface, said user selecting said neutral user interface corresponding to a device which the user desires to control among the devices residing on the home network,

wherein the control device transmits the selected neutral user interface to the gateway,

wherein the gateway converts the transmitted neutral user interface into a device specific user interface which is suitable for the specific client of the user, ~~and~~

wherein the user controls operation of the device using the device specific user interface, and ~~wherein the gateway comprises:~~

wherein the gateway comprises:

a device collection unit for collecting the devices including the neutral user interfaces residing on the home network;

a device database for storing information on the devices collected by the device collection unit;

an integrated user interface generator for generating the integrated user interface based on the information on the devices stored in the device database; and

a user interface conversion unit for converting the integrated user interface generated from the integrated user interface generator into the specific user interface suitable for the specific client of the user.

2. (canceled).

3. (previously presented): The system as claimed in claim 1, the gateway further comprising a protocol unit that supports a protocol for searching for a one device residing on the home network.

4. (previously presented): The system as claimed in claim 1, wherein the information on the devices stored in the device database is meta information on the devices and URL information for accessing the neutral user interfaces.

5. (previously presented): The system as claimed in claim 1, wherein the integrated user interface is described with the neutral user interfaces, wherein the integrated user interface is converted into at least the specific user interface of a plurality of specific user interfaces.

6. (currently amended): A user interface conversion system supporting various devices, comprising:

a control device for controlling predetermined devices residing on a home network; and

a processor comprising a gateway for generating an integrated user interface based on neutral user interfaces of the devices residing on the home network at the request of a user for controlling the devices and converting the generated integrated user interface into a specific user interface supported in a specific client of the user,

wherein the gateway requests the control device to transmit a neutral user interface selected by the user from the integrated user interface, said user selecting said neutral user interface corresponding to a device which the user desires to control among the devices residing on the home network,

wherein the control device transmits the selected neutral user interface to the gateway,

wherein the gateway converts the transmitted neutral user interface into a device specific user interface which is suitable for the specific client of the user, ~~and~~

wherein the user controls operation of the device using the device specific user interface, ~~and wherein the gateway comprises:~~

wherein the gateway comprises:

a device collection unit for collecting the devices including the neutral user interfaces residing on the home network;

a device database for storing information on the devices collected by the device collection unit;

an integrated user interface generator for generating the integrated user interface based on the information on the devices stored in the device database; and

a user interface conversion unit for converting the integrated user interface generated from the integrated user interface generator into the specific user interface suitable for the specific client of the user.

7. (previously presented): A user interface conversion method supporting devices, comprising the steps of:

collecting the devices that include neutral user interfaces and reside on a home network;

extracting and storing information about the collected devices;

generating an integrated user interface based on the stored information about the devices;

converting the generated user interface into a specific user interface supported in a client of a user;

requesting a neutral user interface selected by the user from the integrated user interface, said user selecting said neutral user interface corresponding to a device which the user desires to control among the devices residing on the home network;

receiving the selected neutral user interface; and

converting the received neutral user interface into a device specific user interface which is suitable for the client of the user, wherein the user controls operation of the device using the device specific user interface.

8. (original): The method as claimed in claim 7, wherein the information about the devices stored in a device database is meta information on the devices and URL information for accessing the neutral user interfaces.

9. (original): The method as claimed in claim 7, wherein the integrated user interface is described with the neutral user interfaces, wherein the integrated user interface is converted into at least the specific user interface of a plurality of specific user interfaces.

10. (currently amended): A user interface conversion method supporting various devices, comprising:

(a) requesting, by a user, for a user interface supported in a user's own client;

(b) transmitting neutral user interfaces collected at the request of the user for the user interface;

(c) generating an integrated user interface based on the transmitted neutral user interfaces;

(d) converting the integrated user interface into a specific user interface supported in the client of the user;

(e) transmitting the converted specific user interface to the client of the user;

(f) displaying the integrated user interface converted into the specific user interface on the client of the user;

(g) selecting a device which is desired to be controlled among devices residing on a home network from the integrated user interface displayed on the client; and

(h) controlling operation of the selected device,

wherein (g) comprises:

(g1) requesting a neutral user interface of the selected device;

(g2) receiving the neutral user interface of the selected device; and

(g3) converting the received neutral user interface into a device specific user interface which is suitable for the client of the user, and

wherein (b) further comprises:

requesting an integrated user interface generator to transmit the neutral user interfaces at the request of the user, by a user interface conversion unit[[:]];

requesting a device collection unit to transmit the neutral user interfaces collected ~~therein~~ therein, by the integrated user interface generator; and ~~retrieving the neutral user interfaces collected in a device database, by the device collection unit~~

retrieving the neutral user interfaces collected in a device database, by the device collection unit.

11. (canceled).

12. (canceled).

13. (original): The method as claimed in claim 10, wherein the integrated user interface is described with the neutral user interfaces, wherein the integrated user interface is converted into at least the specific user interface of a plurality of specific user interfaces.

14. (previously presented): A computer-readable recording medium for recording a computer program code for enabling a computer to provide a service of converting interfaces in supporting various devices, the service comprising:

collecting the devices that include neutral user interfaces and reside on a home network;

extracting and storing information about the collected devices;

generating an integrated user interface based on the stored information about the devices;

converting the generated user interface into a specific user interface supported in a client of a user;

requesting a neutral user interface selected by the user from the integrated user interface, said user selecting said neutral user interface corresponding to a device which the user desires to control among the devices residing on the home network;

receiving the selected neutral user interface; and

converting the received neutral user interface into a device specific user interface which is suitable for the client of the user, wherein the user controls operation of the device using the device specific user interface.

15. (original): The computer-readable recording medium of claim 14, wherein the information about the devices stored in a device database is meta information on the devices and URL information for accessing the neutral user interfaces.

16. (original): The computer-readable recording medium of claim 14, wherein the integrated user interface is described with the neutral user interfaces, wherein the integrated user interface is converted into at least the specific user interface of a plurality of specific user interfaces.

17. (currently amended): A computer-readable recording medium for recording a computer program code for enabling a computer to provide a service of converting interfaces in supporting various devices, the service comprising :

(a) requesting, by a user, for a user interface supported in a user's own client;

(b) transmitting neutral user interfaces collected at the request of the user for the user interface;

(c) generating an integrated user interface based on the transmitted neutral user interfaces;

(d) converting the integrated user interface into a specific user interface supported in the client of the user;

(e) transmitting the converted specific user interface to the client of the user;

(f) displaying the integrated user interface converted into the specific user interface on the client of the user;

(g) selecting a device which is desired to be controlled among devices residing on a home network from the integrated user interface displayed on the client; and

(h) controlling operation of the selected device,

wherein (g) comprises:

(g1) requesting a neutral user interface of the selected device;

(g2) receiving the neutral user interface of the selected device; and

(g3) converting the received neutral user interface into a device specific user interface which is suitable for the client of the user, and

wherein (b) further comprises:

requesting an integrated user interface generator to transmit the neutral user interfaces at the request of the user, by a user interface conversion unit[1:1];

requesting a device collection unit to transmit the neutral user interfaces collected ~~therein~~ therein, by the integrated user interface generator; and

retrieving the neutral user interfaces collected in a device database, by the device collection unit.

18. (canceled).

19. (canceled).

20. (original): The computer-readable recording medium of claim 17, wherein the integrated user interface is described with the neutral user interfaces, wherein the integrated user interface is converted into at least the specific user interface of a plurality of specific user interfaces.

21. (previously presented): The system as claimed in claim 1, wherein the specific user interface display text or images representing the devices residing on the home network, based on a capability of the specific client of the user.

22. (previously presented): The system as claimed in claim 21, wherein the capability is computer performance or user interface display capability.